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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,364	01/22/2001	Trung Nguyen	SPLX.P0051	2537
23349	7590	02/17/2004	EXAMINER	
STATTLER JOHANSEN & ADELI P O BOX 51860 PALO ALTO, CA 94303			KERVEROS, JAMES C	
			ART UNIT	PAPER NUMBER
			2133	9
DATE MAILED: 02/17/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/767,364

Applicant(s)

NGUYEN ET AL.

Examiner

James C Kerveros

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 1-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities:

The specification does not comply with the preferred layout as indicated below.

The Applicant is required to insert the missing headings where it applicable.

Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a

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nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

### ***Claim Objections***

Claims 1-11 are objected to because of the following informalities:

Claims 1, 4, 6, and 9 require a transitional phrase " comprising" between the preamble and the body of the claim.

Claims 4 and 9 require indentation. Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(m).

Claim 9, on line 1, between "method" and "for", the word "of" should be deleted.

Claims 2-3, 5, 7, 8, 10 and 11 require a comma between a claim number and "wherein".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Straver et al. (US 4890066) in view of Kobayashi (US 6556535).

Regarding Claims 1-7, 9 and 10, Straver substantially discloses an envelope detector for generating a full-wave rectified signal in response to a differential input signal (Is-Ic) FIG. 2, comprising:

Means differential amplifier (A), for converting the differential input signal (Is-Ic), into a pair of current signals (i1-i2) and the reference voltage (+Vb) to a reference current (I1-I2), as shown in FIG. 2.

Straver does not disclose comparing means to determine if the differential input signal (Is-Ic) is greater than the reference current (I1-I2), and indicating means for indicating the differential signal is valid when it is greater than the reference. Kobayashi, in an analogous art, discloses (FIG. 1) an envelope detector 9 including a comparator 12, which compares the output signal of the amplifier 10 and the reference erasing power value and delivers the result of comparison to the current amplifier 13, which sets an amount of laser diode 14. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate a comparator 12 and indicating means diode 14, as taught by Kobayashi, in the envelop detector of Straver, for the purpose of determining the differential input signal, since the reference of the comparator can be adjusted accordingly to respond to variations of the differential input signal, thus resulting in a more reliable envelope detection.

Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Straver et al. (US 4890066) in view of Kobayashi (US 6556535), as applied to claims 6 and 9 above, and further in view of Shade et al. (US 4809554).

Regarding Claims 8 and 11, the combined reference of Straver and Kobayashi Straver fails to disclose a Schmitt trigger responsive to the output signal, wherein the output signal is passed through the Schmitt trigger having trigger levels set further apart than a change in the output signal during the switching interval. However, Shade, in an analogous art, discloses (FIG. 1) an envelope detector 29 including a full-wave rectifier 26 coupled to a low-pass filter 36 with the output connected to the input of Schmitt trigger 38. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the combined device of Straver and Kobayashi, by connecting the output stage of its filter to a Schmitt trigger, as taught by Shade, for the purpose of detecting the output level corresponding to the differential input signal, since the Schmitt trigger acts as background average device by smoothing the measured points, thus resulting in the reduction of unwanted background noise and erratic measurements.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James C Kerveros whose telephone number is (703) 305-1081. The examiner can normally be reached on 9:00 AM TO 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

U.S. PATENT OFFICE  
Examiner's Fax: (703) 746-4461  
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Date: 2/11/04  
Non-Final Rejection

James C Kerveros  
Examiner  
Art Unit 2133

By: 

  
ALBERT DECADY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100